

Department 23 - Electricity Junior Division

Superintendent:



Entry & Judging Day – Tuesday of the fair

Entry & Judging Time – 1 p.m. - 8 p.m., Face to face judging only

Location – Exhibit Building

Check Out – Exhibits will be released between 4:30 p.m. to 6 p.m. on Sunday of the fair

ADDITIONAL RULES OF ENTRY

- Youth eligible to exhibit in this department are those enrolled in a 4H, FFA, or other approved youth group carrying a similar supervised program in a Energy & Electricity project area.
- All exhibits must be the result of this year's project by the exhibitor.
- Only one exhibit may be entered under each lot number.
- All entries not entered correctly will be judged and placed in the pink ribbon group.

PREMIUMS:	<u>1st</u>	<u>2nd</u>	<u>3rd</u>	<u>4th</u>
	3.00	2.75	2.50	2.25

REQUIREMENTS:

- **Kits:**
 - A 'kit' is a project where the exhibitor purchased a design and materials in pre-packaged form and assembled the pieces into a project
 - Any kits that are entered in this department must be labeled as such on a 3" x 5" index card that is attached to the entry tag.
- **Posters, scrapbooks and display exhibits:** Exhibitors must follow all requirements located in 'General Rules for Junior Division Exhibitors'
- **Electronic media exhibits:** Exhibitors must follow all requirements located in 'General Rules for Junior Division Exhibitors'

CLASS A – ELECTRICITY

Lot Numbers:

1. Homemade flashlight
2. Homemade open & close circuit board
3. Poster, scrapbook or display on safety in the home
4. Poster, scrapbook or display listing appliances and devices in or out of the home that use electricity
5. Poster or display of a simple electromagnet
6. Build a compass
7. Build a galvanometer
8. Build an electric motor
9. Homemade series circuit board
10. Homemade parallel circuit board
11. Homemade electric question board
12. Homemade three-way switch
13. Build a rocket launcher
14. Build an alarm
15. Poster or display about conductors and insulators
16. Poster or display on different meters and how to read them
17. Poster or display about circuit breakers and fuses

18. Poster or display about different types of plugs and indicate their uses
19. Poster or display about different cords indicating proper use, must have a minimum of six (6) cords, each cord should be approximately 6" long
20. Build a trouble light, can be made from a kit
21. Homemade light duty extension cord, 16 gauge or lighter, 10' or shorter
22. Homemade heavy duty extension cord, 14 gauge or heavier with no length limit, 25'+ long cord must use 12 gauge or larger conductor
23. Poster or display on electric wires and cables indicating proper use, must have a minimum of six (6) wires/cables, each wire/cable should be approximately 6" long
24. Demonstration Board using three-way and four-way switches in a lighting circuit, no larger than 3' x 3'
25. Homemade lamp or lighting unit
26. Scrapbook plans or photographs showing lighting improvements made at home
27. Display or poster of 10 or more different electronic parts, each part must be labeled and include a description of how it is used
28. Build a circuit with a diode, include a 3" x 5" index card that explains what a diode does
29. Build a circuit with a transistor, include a 3" x 5" index card that explains what a transistor does
30. Build a circuit with a light emitting diode (LED), include a 3" x 5" index card that explains what a LED is
31. Build a photocell alarm
32. Build a light meter
33. Build a silicon-controlled rectifier (SCR) intruder alarm
34. Build a 6-8 watt amplifier with integrated circuit
35. Build a two-transistor radio receiver
36. Build a tachometer
37. Build a photoelectric controller
38. Poster or display of an electrical control system
39. Poster or display illustrating resistors and how to tell what size they are by color code
40. Poster or display about the history of electricity
41. Poster or display on Morse Code
42. Poster or display on different types of light bulbs and the jobs they do best
43. Poster or display on how electricity is produced
44. Poster or display on how to read an appliance nametag
45. Electrical tool bag, include a 3" x 5" index card explaining what each item in the tool bag is used for
46. Any other exhibit, attach a 3" x 5" index card explaining what it is

CLASS B - SELF-DETERMINED - ELECTRICITY

Self-determined project exhibits are records of projects not listed in the premium list or an expansion of a traditional project beyond limits of the project or in greater depth than the project outlines.

REQUIREMENTS: Electronic media entries, posters, scrapbooks and displays must conform to all requirements listed in 'General Rules for Junior Division Exhibitors'

Lot Numbers:

1. A poster promoting your self-determined project
2. An article made during current year with a 3" x 5" index card attached identifying resources. The article should be of reasonable size to exhibit in the Expo building
3. A collection made during current year with a 3" x 5" index card identifying work done
4. A scrapbook with story or essay, drawings, and photos of project work done during the current enrollment year
5. Any other self-determined project not listed above